

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY CONSTRUCTION PERMIT

Permit No. 0132-AC004
Application No. X011

Final - Issue Date: June 4, 2002

The Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues a construction permit to the Permittee, **Kotzebue Electric Association**, for the **Prevention of Significant Deterioration Project** at the **Kotzebue Power Plant**.

This permit satisfies the obligation of the owner and operator to obtain a construction permit as set out in AS 46.14.130(a).

As required by AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this construction permit.

[18 AAC 50.320(b), 1/18/97]

John F. Kuterbach, Manager
Air Permits Program

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List of Abbreviations Used in this Permit

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
AS.....	Alaska Statutes
ASTM.....	American Society of Testing and Materials
C.F.R.	Code of Federal Regulations
COMS.....	Continuous Opacity Monitoring System
dscf.....	Dry standard cubic feet
EPA	US Environmental Protection Agency
gr/dscf.....	grain per dry standard cubic feet (1 pound = 7000 grains)
GPH.....	gallons per hour
HAPS.....	Hazardous Air Pollutants [hazardous air contaminants as defined in AS 46.14.990(14)]
ID	Source Identification Number
MACT	Maximum Achievable Control Technology
Mlb	thousand pounds
NESHAPs	Federal National Emission Standards for Hazardous Air Pollutants [as defined in 40 C.F.R. 61]
NSPS	Federal New Source Performance Standards [as defined in 40 C.F.R. 60]
PPM.....	Parts per million
PS	Performance specification
PSD	Prevention of Significant Deterioration
RM.....	Reference Method
SIC.....	Standard Industrial Classification
SO ₂	Sulfur dioxide
tph.....	Tons per hour
tpy.....	Tons per year
VOC	volatile organic compound [as defined in 18 AAC 50.990(103)]
Wt%.....	weight percent

Section 1. Identification

Names and Addresses

Permittee:	Kotzebue Electric Association P.O. Box 44 Kotzebue, Alaska 99752
Facility:	Kotzebue Power Plant
Location:	66° 53' 52" North; 162° 35' 49" West
Physical Address:	4th and Lagoon Street, Building 245B Kotzebue, Alaska 99752
Owner:	Kotzebue Electric Association
Operator:	Kotzebue Electric Association
Designated Agent:	Mr. Brad Reeve General Manager Kotzebue Electric Association P.O. Box 44 Kotzebue, Alaska 99752 (907) 442-3491
Responsible Official	Mr. Brad Reeve
Billing Contact:	Mr. Brad Reeve

SIC Code of the Facility: 4911 - Establishments engaged in the generation, transmission, and/or distribution of electric energy for sale.

[18 AAC 50.320(a), 1/18/97]

Section 2. Emission Information and Classification

Emissions of Regulated Air Contaminants, as provided in Permittee's application:

- a. Nitrogen Oxides (NO_x), Particulate Matter (PM₁₀), Sulfur Dioxide (SO₂), Carbon Monoxide (CO), and Volatile Organic Compounds (VOC).

Construction Permit Classification:

- a. The project requires construction permit provisions under 18 AAC 50.300(h)(3) as a modification to an existing facility classified under 18 AAC 50.300(c).

Facility Classifications:

- a. The facility is classified as Prevention of Significant Deterioration (PSD) Major under 18 AAC 50.300(c)(1) as it contains sources with the potential to emit greater than 250 tons per year of NO_x.
- b. The project is classified as a Prevention of Significant Deterioration (PSD) Major modification under 18 AAC 50.300(h)(3) for NO_x SO₂, and CO.

[18 AAC 50.320(a)(1), 1/18/97]

Section 3. Source Inventory and Description

Sources listed below have specific monitoring, record keeping, or reporting conditions in this permit. Source descriptions and ratings are given for identification purposes only.

Table 1: Source Inventory

ID	Source Name	Source Identification	Install Date	Rating/Size
7B	Caterpillar Diesel Generator	Caterpillar 3516 Diesel Generator	1987	1,135 kW
9	EMD Diesel Generator	GM EMD 16-645-E3B Diesel Generator	1983	2,100 kW
10	EMD Diesel Generator	GM EMD 20-710-G4 Diesel Generator	1992	3,080 kW
11	Caterpillar Diesel Generator	Caterpillar 3512 Diesel Generator	1992	1,020 kW
12	Caterpillar Diesel Generator	Caterpillar 3512 Diesel Generator	1992	1,020 kW
14	EMD Diesel Generator	GM EMD 16-710-G4 Diesel Generator	1994	2,865 kW
T1	Fuel Storage Tank	Diesel Storage Tank	1978	1,000,000 gal
T2	Fuel Storage Tank	Diesel Storage Tank	1984	1,000,000 gal

Section 4. Ambient Air Quality Standards and Maximum Allowable Ambient Concentrations

- 1. General Description.** This permit contains terms and conditions to ensure that allowable emissions from the facility and associated growth will not cause an ambient concentration that exceeds the concentrations established in Table 6 of 18 AAC 50.310(d)(2) at any location that does not or would not meet the ambient air quality standard or maximum allowable ambient concentration.
- 2. Authorization and Notification Requirements.** The Permittee shall modify and operate the facility in accordance with the construction permit application and application supplements listed in Section 15, as may be currently applicable. This permit authorizes the Permittee to install and operate the sources listed in Table 1.

Notwithstanding the regulations set forth in 18 AAC 50.300(h), the Permittee shall notify the Department, in accordance with the following condition, prior to:

- 2.1 installing a permanent stationary emission unit at the facility that is not listed in Table 1; or
 - 2.2 making a physical or operational change to a source listed in Table 1 that would cause the design rating, capacity, or throughput to deviate from the description provided in this construction permit.
- 3. Sulfur Dioxide Requirements.** The Permittee shall comply with the following requirements to protect ambient air:
 - 3.1 The sulfur content of liquid fuel burned in Sources ID No. 7B, 9-12, and 14 shall not exceed 0.49 percent by weight.
 - a. Obtain a statement or receipt from the fuel supplier for each fuel shipment received that certifies the fuel sulfur content. If a certificate is not available from the supplier, analyze a representative sample of the fuel to determine the sulfur content using ASTM Designation D 396-92 or 975-94 or an alternative method approved by the Department.
 - b. Attach copies of the fuel sulfur content certifications with the Operating Report required by Condition 37.
 - c. Report as a permit deviation under Condition 26 whenever fuel combusted does not meet the requirements of Condition 3.1.
- 4. Stack Parameters.** The Permittee shall operate the Sources ID No. 7B, 9-12, and 14 with the following stack parameters:
 - 4.1 Engine exhausts shall be no less than 16.5 meters above ground level;
 - 4.2 Provide stacks with:

- a. sampling ports that comport with 40 CFR 60, Appendix A, Method 1, Section 2.1, and a stack or duct free of cyclonic flow at the port location during applicable test methods and procedures;
 - b. safe sampling platforms;
 - c. safe access to sampling platforms; and
 - d. utilities for emission sampling and testing equipment;
- 4.3 Submit to ADEC by December 1, 2002, as-Built engineering drawings and photographs of stack parameters on each source to ensure compliance with Conditions 4.1 and 4.2.

5. Ambient Monitoring Requirements. The Permittee shall comply with the following requirements:

- 5.1 By December 1, 2002, submit an ambient impact modeling assessment that demonstrates the project impacts are less than the pre-construction monitoring threshold for SO₂ of 13 µg/m³ over a 24-hour averaging period; or
- 5.2 Operate, maintain, and calibrate at least one ambient air contaminant monitoring station to monitor SO₂ as follows:
- a. The station must be sited in a location for which the Department and Permittee agree would measure the maximum ambient concentration as predicted by the ambient concentration modeling performed by the applicant and the Department.
 - b. Submit to the Department for approval an ambient monitoring plan for Sulfur Dioxide (SO₂) by the later of:
 - (i) January 1, 2003; or
 - (ii) 30 days after the Department notifies the Permittee that the project assessment of Condition 5.1 shows that impacts exceed the threshold listed in Condition 5.1.

Identify the monitoring site and rationale for site selection.

- c. Measure the ambient concentration of SO₂ for at least one year starting no less than 120 days after Department approval of the monitoring plan. Upon completion of the monitoring, the Permittee may request cancellation of monitoring provided the data exhibits compelling evidence that the ambient air standards for SO₂ are being met.
- d. Operate the station in accordance with the monitoring plan approved under Condition 5.2b.

- e. Submit a copy of the quarterly monitoring report within 60 days after the end of each calendar quarter. List all pollutant data collected, system downtime, periods for which collected data do not meet the data validation requirements, and periods for which the data is questionable. List equipment audit results during the quarter; or
- 5.3 Enter into a shared monitoring program with Nome Joint Utility System (NJUS). Under this program, NJUS would operate, maintain, and calibrate at least one ambient air contaminant monitoring station to monitor SO₂ in Nome as set out by Permit No. 9932-AC003 and as follows:
- a. The station must be sited in a location for which the Department and NJUS agree would measure the maximum ambient concentration as predicted by the ambient concentration modeling performed by NJUS and the Department.
 - b. NJUS shall submit to the Department for approval an ambient monitoring plan for Sulfur Dioxide (SO₂) by the later of:
 - (i) March 22, 2000; or
 - (ii) 30 days after the Department notifies NJUS that the project assessment of Condition 14.1 shows that impacts exceed the threshold listed in Condition 14.1.
- NJUS shall identify the monitoring site and rationale for site selection.
- c. NJUS shall measure the ambient concentration of SO₂ for at least one year starting no less than 120 days after Department approval of the monitoring plan. Upon completion of the monitoring, NJUS may request cancellation of monitoring provided the data exhibits compelling evidence that the ambient air standards for SO₂ are being met.
 - d. NJUS shall operate the station in accordance with the monitoring plan approved under Condition 14.2(b).
 - e. NJUS shall submit a copy of the quarterly monitoring report within 60 days after the end of each calendar quarter. The report shall list all pollutant data collected, system downtime, periods for which collected data do not meet the data validation requirements, and periods for which the data is questionable. In addition, the report shall list equipment audit results during the quarter.

Section 5. Best Available Control Technology

The Permittee shall comply with best available control technology limits and the monitoring, recording and reporting requirements as set out below:

6. Nitrogen Dioxide BACT Requirements.

6.1 For Source ID No. 7B:

- a. Limit NO_x emissions to 45 lb/hr, expressed as NO₂, averaged over the duration of an emission performance test or any three consecutive hours.
- b. Operate Source No. 7B with good combustion practices.
- c. By December 1, 2002, conduct a source test for NO_x to ascertain compliance with the emission limit in Condition 6.1a in accordance with the requirements set forth in Section 9 of this permit. Determine the NO_x emission rate, expressed as NO₂, using exhaust properties determined by both Method 19 and exhaust gas measurements as set out in Section 9. Monitor and record the fuel consumption rate and electrical power-generating rate during each source test run and provide in the emission source test report.

6.2 For Source ID No. 9:

- a. Limit NO_x emissions to 55 lb/hr, expressed as NO₂, averaged over the duration of an emission performance test or any three consecutive hours.
- b. Operate Source No. 9 with optimal fuel injection timing retard, with an improved injector design, and with a four pass aftercooler with separate cooling water supply. Optimal fuel injection timing retard balances low NO_x emissions with engine performance (i.e. fuel consumption and visible emissions).
- c. By December 1, 2002, conduct a source test for NO_x to ascertain compliance with the emission limit in Condition 6.2a in accordance with the requirements set forth in Section 9 of this permit. Determine the NO_x emission rate, expressed as NO₂, using exhaust properties determined by both Method 19 and exhaust gas measurements as set out in Section 9. Monitor and record the fuel consumption rate and electrical power-generating rate during each source test run and provide in the emission source test report. In addition, document the fuel injection timing setting and provide in the emission source test report.
- d. No less than once per calendar year after 2002, verify that engine setting used during the source test in Condition 6.2c are being maintained. Submit documents or maintenance logs in the Facility Operating Report required by Condition 37.

6.3 For Sources ID No. 10:

- a. Limit NO_x emissions to 67 lb/hr, expressed as NO₂, averaged over the duration of an emission performance test or any three consecutive hours.
- b. Operate Source No. 10 with optimal fuel injection timing retard, with a new injector design, and with a four pass aftercooler with separate cooling water supply. Optimal fuel injection timing retard balances low NO_x emissions with engine performance (i.e. fuel consumption and visible emissions).
- c. By December 1, 2002, conduct a source test for NO_x to ascertain compliance with the emission limit in Condition 6.1a in accordance with the requirements set forth in Section 9 of this permit. Determine the NO_x emission rate, expressed as NO₂, using exhaust properties determined by both Method 19 and exhaust gas measurements as set out in Section 9. Monitor and record the fuel consumption rate and electrical power-generating rate during each source test run and provide in the emission source test report. In addition, document the fuel injection timing setting and provide in the emission source test report.
- d. No less than once per calendar year after 2002, verify that engine settings used in the source test in Condition 6.3c are being maintained. Submit documents or maintenance logs in the Facility Operating Report required by Condition 37.

6.4 For Sources ID No. 11 and 12:

- a. Limit NO_x emissions from each source to 36 lb/hr, expressed as NO₂, averaged over the duration of an emission performance test or any three consecutive hours.
- b. Operate Sources No. 11 and 12 with good combustion practices.
- c. By December 1, 2002, conduct a source test on each unit for NO_x to ascertain compliance with the emission limit in Condition 6.4a in accordance with the requirements set forth in Section 9 of this permit. Determine the NO_x emission rate, expressed as NO₂, using exhaust properties determined by both Method 19 and exhaust gas measurements as set out in Section 9. Monitor and record the fuel consumption rate and electrical power-generating rate during each source test run and provide in the emission source test report.

6.5 For Source ID No. 14:

- a. Limit NO_x emissions to 60 lb/hr, expressed as NO₂, averaged over the duration of an emission performance test or any three consecutive hours.

- b. Operate Source No. 14 with optimal fuel injection timing retard, with an improved injector design, and with a four pass aftercooler with separate cooling water supply. Optimal fuel injection timing retard balances low NO_x emissions with engine performance (i.e. fuel consumption and visible emissions).
- c. By December 1, 2002, conduct source tests for NO_x to ascertain compliance with the emission limit in Condition 6.5a in accordance with the requirements set forth in Section 9 of this permit. Determine the NO_x emission rate, expressed as NO₂, using exhaust properties determined by both Method 19 and exhaust gas measurements as set out in Section 9. Monitor and record the fuel consumption rate and electrical power-generating rate during each source test run and provide in the emission source test report. In addition, document the fuel injection timing setting and provide in the emission source test report.
- d. No less than once per calendar year after 2002, verify that engine setting used in the source test in Condition 6.5c are being maintained. Submit documents or maintenance logs in the Facility Operating Report required by Condition 37.

7. Sulfur Dioxide BACT Requirements.

7.1 For Sources ID Nos. 9 through 12 and 14:

- a. The sulfur content of oil burned shall not exceed 0.49 percent by weight at any time.
- b. Monitor, record, and report as set out in Condition 3.

8. Carbon Monoxide BACT Requirements.

8.1 For Source ID No. 9:

- a. Limit CO emissions to 10 lb/hr, averaged over the duration of an emission performance test or any three consecutive hours.
- b. Operate with good combustion practices.
- c. By December 1, 2002, conduct a source test for CO at the maximum and minimum load within the normal operating range in order to ascertain compliance with the emission limit in Condition 8.1a in accordance with the requirements set forth in Section 9 of this permit. Determine the CO emission rate using exhaust properties determined by both Method 19 and exhaust gas measurements as set out in Section 9. Monitor and record the fuel consumption rate and electrical power-generating rate during each source test run and provide in the emission source test report.

8.2 For Source ID No. 10:

- a. Limit CO emissions to 16 lb/hr, averaged over the duration of an emission performance test or any three consecutive hours.
- b. Operate with good combustion practices.
- c. By December 1, 2002, conduct a source test for CO at the maximum and minimum load within the normal operating range to ascertain compliance with the emission limit in Condition 8.2a in accordance with the requirements set forth in Section 9 of this permit. Determine the CO emission rate using exhaust properties determined by both Method 19 and exhaust gas measurements as set out in Section 9. Monitor and record the fuel consumption rate and electrical power-generating rate during each source test run and provide in the emission source test report.

8.3 For Sources ID No. 11 and 12:

- a. Limit CO emissions from each source to 6 lb/hr, averaged over the duration of an emission performance test or any three consecutive hours.
- b. Operate with good combustion practices.
- c. By December 1, 2002 conduct a source test on each unit for CO at the maximum and minimum load within the normal operating range to ascertain compliance with the emission limit in Condition 8.3a in accordance with the requirements set forth in Section 9 of this permit. Determine the CO emission rate using exhaust properties determined by both Method 19 and exhaust gas measurements as set out in Section 9. Monitor and record the fuel consumption rate and electrical power-generating rate during each source test run and provide in the emission source test report.

[18 AAC 50.320(a)(2)(A-C), 1/18/97]

Section 6. Federal New Source Performance Standards

The Permittee shall comply with the requirements of 40 C.F.R. 60, New Source Performance Standards (NSPS) as they apply to affected facilities. Notify and report as set out below and as specified in Condition 36.

9. 40 C.F.R. 60, Subpart Kb, Stationary Tanks – Source ID No. T2:

- 9.1 Applicability and designation of affected facility, 40 C.F.R. 60.110b. Volatile organic liquid storage tanks greater than 40 cubic meters in volume (10,567 gallons) for which construction, reconstruction, or modification commenced after July 23, 1984, are subject to this Subpart as listed in 40 C.F.R. 60.110b(a).
- 9.2 Monitoring of operations, 40 C.F.R. 60.116b. Pursuant to 40 C.F.R. 60.116b(a) and (b), keep readily accessible records showing the dimension of the storage vessels and an analysis showing the capacity of the storage vessel for each storage tank greater than equal to 40 cubic meters (10,567 gallons) for the life of the tank.

[18 AAC 50.320(a)(2)(A-E), 1/18/97]

{18 AAC 50.040(a)(2)(M), 1/18/97}

Section 7. State Emission Standards**Subject to Industrial Processes and Fuel Burning Equipment:***Visible Emissions*

- 10.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from industrial processes and fuel burning equipment to reduce visibility through the exhaust effluent:

10.1 by greater than 20% for more than three minutes aggregated in any one hour; or

10.2 by more than 20% averaged over any six consecutive minutes.

10.3 Monitor, record and report according to Section 12.

[18 AAC 50.055(a)(1), 1/18/97]

[18 AAC 50.320(a)(2), 1/18/97]

[18 AAC 50.320(a)(2)(A-E), 1/18/97]

Particulate Matter

- 11.** The Permittee shall not cause or allow particulate matter emitted from industrial processes and fuel burning equipment to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

11.1 Monitor, record and report according to Section 12.

[18 AAC 50.055(b)(1), 1/18/97]

[18 AAC 50.320(a)(2), 1/18/97]

[18 AAC 50.320(a)(2)(A-E), 1/18/97]

Sulfur Compound Emissions

- 12.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO₂, from industrial processes and fuel burning equipment to exceed 500 PPM averaged over three hours.

12.1 Compliance with this condition is assured by using a grade of fuel that limits sulfur content to less than 0.49% by weight as set out in Condition 3.

12.2 Monitor, record, and report according to Condition 3.

[18 AAC 50.055(c), 1/18/97]

[18 AAC 50.320(a)(2), 1/18/97]

[18 AAC 50.320(a)(2)(A-E), 1/18/97]

Section 8. Generally Applicable Requirements

- 13. Asbestos NESHAP.** The Permittee shall comply with the requirements set forth in 40 C.F.R. 61.145, 61.150, and 61.152, and the applicable sections set forth in 40 C.F.R. 61, Subpart A and Appendix A.

[18 AAC 50.040(b)(3), 1/18/97]

[18 AAC 50.320(a)(2), 1/18/97]

[Federal Citation: 40 C.F.R. 61, Subpart M, 12/19/96]

- 14. Refrigerant Recycling and Disposal.** The Permittee shall comply with the standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F.

[18 AAC 50.040(d), 1/18/97]

[18 AAC 50.320(a)(2), 1/18/97]

[Federal Citation: 40 C.F.R. 82, Subpart F, 7/1/97]

- 15. Good Air Pollution Control Practice.** The Permittee shall install, maintain and operate, in accordance with manufacturer's procedures, fuel burning equipment, process equipment, emission control devices, testing equipment and monitoring equipment to provide optimum control of air contaminant emissions during all operating periods. This condition is not federally-enforceable.

[18 AAC 50.030, 1/18/97]

[18 AAC 50.320(a)(2)(A), 1/18/97]

- 16. Dilution.** The Permittee shall not dilute emissions with air to comply with this permit.

[18 AAC 50.045(a) 1/18/97]

16.1 Check all ductwork and exhaust systems for leaks, and repair any leaks found

- a. No sooner than 30 days prior to conducting a source test to demonstrate compliance with this permit,
- b. Once during the first six months of this permit and every 17,520 hours of source operation thereafter for sources subject to visible emission observations conducted pursuant to Section 13, or
- c. Once during the life of this permit for any other source regulated by this permit.

[18 AAC 50.320(a)(2), 1/18/97]

16.2 Keep records of all inspections and repairs performed under this condition.

[18 AAC 50.320(a)(2)(D), 1/18/97]

16.3 Upon request of the department, submit copies of the records.

[18 AAC 50.320(a)(2)(E), 1/18/97]

- 17. Modification.** The Permittee shall not construct, operate, or modify a source that will result in a violation of the applicable emission standards or that will interfere with the attainment or maintenance of the ambient air quality standards or maximum allowable ambient concentrations.

[18 AAC 50.045(c), 1/18/97]
[18 AAC 50.320(a)(2), 1/18/97]

- 17.1 Obtain all permits or permit revisions required for construction, modification, or operation under 18 AAC 50 and AS 46.14.

[18 AAC 50.320(a)(2), 1/18/97]

- 17.2 Comply with the conditions of all permits obtained under 18 AAC 50 and AS 46.14.

[18 AAC 50.320(a)(2), 1/18/97]

- 18. Bulk Materials Handling, Construction and Industrial Activities.** The Permittee shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air as a result of industrial activities, construction projects, or the handling, transportation, and storage of bulk materials.

[18 AAC 50.040(e) & 18 AAC 50.045(d), 1/18/97]
[18 AAC 50.320(a)(2), 1/18/97]

- 18.1 Keep records describing all precautions taken to prevent particulate matter from becoming airborne due to any of the activities described in this condition. If the precautions taken by the Permittee are not listed in the State Air Quality Control Plan, also record a statement describing why the Permittee finds the precaution reasonable. Reasonable precautions, as listed in the State Air Quality Control Plan, include

- a. installation and use of hoods, fans, and dust collectors to enclose and vent the handling of dusty materials;
- b. use of water or chemicals for dust control in the demolition of existing structures, construction operations, road grading, or land clearing; and
- c. application of asphalt, oil, water, or suitable chemicals on dirt roads, material stockpiles and other surfaces which can create airborne dusts.

[18 AAC 50.040(e) & 18 AAC 50.320(a)(2)(A-E), 1/18/97]

- 18.2 At least once each month, perform visual surveys of fugitive particulate matter sources as follows:

- a. Conduct a survey of all bulk materials handling, construction and industrial activities at the facility for the potential of airborne particulate matter in accordance with the procedures listed in 40 C.F.R. 60, Appendix A, RM 22
- b. Within 2 days of discovering that particulate matter emissions are leaving the property at a level which potentially could unreasonably interfere with the enjoyment of life or property, be injurious to human health or welfare, animal or plant life, or property, or cause an exceedance of a PM₁₀ ambient air quality standard or increment contained in 18 AAC 50.010(1) or 18 AAC 50.020(b)(2), initiate corrective actions to prevent emissions from leaving the property

- c. Keep contemporaneous records of all visual surveys performed and corrective actions taken to prevent particulate matter emissions from leaving the property. Submit summaries of the records with the report required by Condition 37 of this permit.
- d. Submit a report in accordance with Condition 35 whenever a visual survey reveals that particulate matter emissions at levels specified in Condition 18.2b are leaving the property.

[18 AAC 50.320(a)(2)(A-E), 1/18/97]

- 19. Stack Injection.** The Permittee shall not release materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack at a source constructed or modified after November 1, 1982, unless approved in writing by the department.

[18 AAC 50.055(g) and 18 AAC 50.310(m), 1/18/97]

- 20. Open Burning.** The Permittee shall comply with the following requirements when conducting open burning at the facility:

- 20.1 Open burning of asphalts, rubber products, plastics, tars, oils, oily wastes, contaminated oil cleanup materials, or other materials in a way that gives off black smoke is prohibited without written approval of the department in accordance with the procedures set forth in 18 AAC 50.065.

[18 AAC 50.040(e) & 18 AAC 50.065(b), 1/18/97]

[18 AAC 50.320(a)(2), 1/18/97]

- 20.2 Open burning or incineration of pesticides, halogenated organic compounds, cyanic compounds, or polyurethane products in a way that gives off black smoke or acidic gases or particulate matter is prohibited.

[18 AAC 50.040(e) & 18 AAC 50.065(b), 1/18/97]

[18 AAC 50.320(a)(2), 1/18/97]

- 20.3 Open burning of putrescible garbage, animal carcasses, or petroleum-based materials, including materials contaminated with petroleum or petroleum derivatives, is prohibited if it causes odor or black smoke that has an adverse effect on nearby persons or property.

[18 AAC 50.040(e) & 18 AAC 50.065(b), 1/18/97]

[18 AAC 50.320(a)(2), 1/18/97]

- 20.4 Open burning is prohibited in an area if the department declares an air quality advisory under 18 AAC 50.245, stating that open burning is not permitted in that area for the day.

[18 AAC 50.040(e) & 18 AAC 50.065(b), 1/18/97]

[18 AAC 50.320(a)(2), 1/18/97]

20.5 When conducting open burning, the Permittee shall ensure that

- a. The material is kept as dry as possible through the use of cover or dry storage;
- b. Before igniting the burn, noncombustibles are separated to the greatest extent practicable;
- c. Natural or artificially induced draft is present;
- d. To the greatest extent practicable, combustibles are separated from grass or peat layer;
- e. Combustibles are not allowed to smolder; and
- f. Sufficient written records are kept to demonstrate that the Permittee complies with the limitations in this condition. Upon request of the department, submit copies of the records.

[18 AAC 50.040(e), 18 AAC 50.065(a), & 18 AAC 50.335(g – h), 1/18/97 & 6/21/98]
[18 AAC 50.320(a)(2), 1/18/97]

21. Air Pollution Prohibited. The Permittee shall not cause any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.110, 5/26/72]
[18 AAC 50.040(e), 1/18/97]
[18 AAC 50.320(a)(2), 1/18/97]

21.1 Within 24 hours of receiving a complaint that is attributable to emissions from the facility, investigate the complaint, and if warranted, initiate corrective actions to alleviate or eliminate the cause of the complaint.

[18 AAC 50.320(a)(2)(A-C), 1/18/97]

21.2 Keep records of the date, time, and nature of all complaints received and a summary of the investigation, and if applicable, the corrective actions undertaken for complaints attributable to emissions from the facility. Upon request of the department, submit copies of the records.

[18 AAC 50.320(a)(2)(D-E), 1/18/97]

22. Technology-Based Emission Standard. If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235, causes emissions in excess of a technology-based emission standard listed in Conditions 13 and 14, the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard.

[18 AAC 50.235(a), 1/18/97]
[18 AAC 50.320(a)(2), 1/18/97]

Section 9. General Source Testing and Monitoring Requirements

- 23. Requested Source Tests.** In addition to any source testing explicitly required by this permit, the Permittee shall conduct source testing as requested by the department to determine compliance with applicable permit requirements.

[18 AAC 50.220(a), 1/18/97]
[18 AAC 50.345(a)(10), 1/18/97]

- 24. Operating Conditions.** Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing

24.1 At a point or points that characterize the actual discharge into the ambient air; and

24.2 At the maximum rated burning or operating capacity of the source or another rate determined by the department to characterize the actual discharge into the ambient air.

[18 AAC 50.220(b) & (c), 1/18/97]
[18 AAC 50.320(a)(2)(A-C), 1/18/97]

- 25. Reference Test Methods.** The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:

25.1 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(a) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60.

[18 AAC 50.220(b) & (c), 1/18/97]
[18 AAC 50.320(a)(2)(A-C), 1/18/97]

25.2 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 61.

[18 AAC 50.220(b) & (c), 1/18/97]
[18 AAC 50.320(a)(2)(A-C), 1/18/97]

25.3 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 C.F.R. 63.

[18 AAC 50.220(b) & (c), 1/18/97]
[18 AAC 50.320(a)(2)(A-C), 1/18/97]

25.4 Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Section 13 of this permit. Visibility source testing is exempt from the requirements listed in Conditions 27 through 29. Except as otherwise directed by the Department, attach visible emission source testing results to the Facility Operating Report required by Condition 37 of this permit.

[18 AAC 50.220(b) & (c), 1/18/97]
[18 AAC 50.320(a)(2)(A-C), 1/18/97]

25.5 Source testing for emissions of particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified 40 C.F.R. 60, Appendix A.

[18 AAC 50.220(b) & (c), 1/18/97]
[18 AAC 50.320(a)(2)(A-C), 1/18/97]

25.6 Source testing for emissions of PM₁₀ must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M.

[18 AAC 50.220(b) & (c), 1/18/97]
[18 AAC 50.320(a)(2)(A-C), 1/18/97]

25.7 Source testing for emissions of any contaminant may be determined using an alternative method approved by the department in accordance with Method 301 in Appendix A to 40 C.F.R. 63.

[18 AAC 50.220(b) & (c), 1/18/97]
[18 AAC 50.320(a)(2)(A-C), 1/18/97]

26. Excess Air Requirements. To determine compliance with this permit, standard exhaust gas volumes must only include the volume of gases formed from the theoretical combustion of fuel, plus the excess air volume normal for the specific source type, corrected to standard conditions (dry gas at 70° F and an absolute pressure of 760 millimeters of mercury).

[18 AAC 50.220(b) & (c), 1/18/97]
[18 AAC 50.320(a)(2)(A-C), 1/18/97]
[18 AAC 50.990(88), 1/18/97]

27. Test Plans. Before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance, and must specify how the source will operate during the test and how the Permittee will document this operation. A complete plan must be submitted within 60 days of receiving a request under Condition 23 and at least 30 days before the scheduled date of any tests.

[18 AAC 50.345(a)(10), 1/18/97]
[18 AAC 50.320(a)(2), 1/18/97]
[18 AAC 50.320(a)(2)(A-C), 1/18/97]

28. Test Notification. At least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and time the source test will begin.

[18 AAC 50.345(a)(10), 1/18/97]
[18 AAC 50.320(a)(2), 1/18/97]
[18 AAC 50.335(g), 1/18/97]

29. Test Reports. Within 45 days after completing a source test, the Permittee shall submit two copies of the results, to the extent practical, in the format set out in the *Source Test Report Outline* of Volume III, Section IV.3 of the State Air Quality Control Plan, adopted by reference in 18 AAC 50.030(8). The Permittee shall certify the results as set out in Condition 31 of this permit.

[18 AAC 50.345(a)(10), 1/18/97]

[18 AAC 50.320(a)(2), 1/18/97]
[18 AAC 50.320(a)(2)(D), 1/18/97]

- 30. Continuous Monitoring Systems.** If required by terms and conditions of this permit, install, calibrate, conduct applicable continuous monitoring system performance specification tests listed in 40 C.F.R. 60, Appendix B, effective July 1, 1997, and certify test results; operate; and maintain air contaminant emissions and process monitoring equipment on the sources as described herein and in documents provided by the Permittee, listed in Section 15. Submit monitoring equipment siting, operating, maintenance plans, and procedures for approval by the Department.

[18 AAC 50.320(a)(2), 1/18/97]

Section 10. General Recordkeeping, Reporting, and Compliance Certification Requirements

- 31. Certification.** The Permittee shall certify all reports, compliance certifications, or other documents submitted to the Department and required under this permit by including the signature of a responsible official for the permitted facility following the statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete." For the same six-month reporting period, the excess emission reports submitted pursuant to Condition 35 may be certified with the operating report required by Condition 37 of this permit. All other reports must be certified upon submittal. When certifying a permit application or compliance certification, the official's signature must be notarized.

[18 AAC 50.205, 1/18/97]

[18 AAC 50.345(a)(9), 1/18/97]

[18 AAC 50.320(a)(2) & 18 AAC 50.320(a)(2)(E), 1/18/97]

- 32. Submittals.** Unless otherwise directed by the department or this permit, the Permittee shall send reports, compliance certifications, and other documents required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician.

[18 AAC 50.320(a)(2)(E), 1/18/97]

- 33. Information Requests.** The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by this permit. The Department, in its discretion, will require the Permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.200, 1/18/97]

[18 AAC 50.345(a)(8), 1/18/97]

[18 AAC 50.320(a)(2) & 18 AAC 50.320(a)(2)(A-E), 1/18/97]

- 34. Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including

- 34.1 Copies of all reports and certifications submitted pursuant to this Section of this permit.
- 34.2 Records of all monitoring required by this permit, and information about the monitoring including
 - a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;
 - b. sampling dates and times of sampling and measurements;
 - c. the operating conditions that existed at the time of sampling or measurement;

- d. the date analyses were performed;
- e. the location where samples were taken;
- f. the company or entity that performed the sampling and analyses;
- g. the analytical techniques or methods used in the analyses; and
- h. the results of the analyses.

[18 AAC 50.320(a)(2)(D), 1/18/97]

- 35. Excess Emission and Permit Deviation Reports.** The Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit or that present a potential threat to human health or safety as soon as possible, but no later than 48 hours after the event is discovered. The report must include the information listed on the form contained in Section 14 of this permit. The Permittee may use this form to report emissions under this condition.

[18 AAC 50.235(a)(2) & 18 AAC 50.240(c), 1/18/97]

[18 AAC 50.320(a)(2)(E), 1/18/97]

- 36. NSPS and NESHAP Reports.** The Permittee shall submit to the Department copies of federal reports, as they apply to the facility as follows:

- 36.1 Attach a copy of any NSPS and NESHAP reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10 to the Operating Report required by Condition 37 if a copy has not already been sent to the appropriate Department office.
- 36.2 The Permittee shall notify the Department of any EPA granted waivers of NSPS or NESHAP emission standards, recordkeeping, monitoring, performance testing, or reporting requirements within 30 days after the Permittee receives a waiver if the Department has not already been provided a copy by EPA.

[18 AAC 50.040, 1/18/97]

[40 C.F.R. 60 & 40 C.F.R. 61, 7/1/97]

- 37. Operating Reports.** During the life of this permit, the Permittee shall submit an original and two copies of an operating report by August 1 for the period January 1 to June 30 and by February 1 for the period July 1 to December 31. This report must include copies of the records required to be reported by the conditions of this permit. In addition, the report must include a listing of all dates of deviations and excess emissions, corresponding with Condition 35, which occurred during the reporting period. If the Permittee is certifying the excess emission and permit deviation report pursuant to Condition 31, then a copy of each excess emission and permit deviation report must be attached to the operating report.

[18 AAC 50.320(a)(2)(A-E), 1/18/97]

Section 11. Standard Conditions Not Otherwise Included in the Permit

- 38.** Consistent with Alaska law, for purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any standard in this permit, nothing in this permit precludes the use of any credible evidence of information relevant to whether the facility would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[18 AAC 50.320(a)(2), 1/18/97]

[Federal Citation: 40 C.F.R. 52.12(c), 7/1/99]

- 39.** The Permittee must comply with each permit term and condition. Noncompliance constitutes a violation of AS 46.14, 18 AAC 50, and the Clean Air Act, except for those requirements designated as not federally-enforceable, and is grounds for:

39.1 an enforcement action,

39.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280, or

39.3 denial of an construction-permit renewal application.

[18 AAC 50.345(a)(1), 1/18/97]

[18 AAC 50.320(a)(1), 1/18/97]

- 40.** It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.345(a)(2), 1/18/97]

[18 AAC 50.320(a)(2), 1/18/97]

- 41.** Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of this permit.

[18 AAC 50.345(a)(3), 1/18/97]

[18 AAC 50.320(a)(2), 1/18/97]

- 42.** Compliance with permit terms and conditions is considered to be compliance with those requirements that are:

42.1 included and specifically identified in the permit, or

42.2 determined in writing in the permit to be inapplicable.

[18 AAC 50.345(a)(4), 1/18/97]

[18 AAC 50.320(a)(2), 1/18/97]

- 43.** The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any construction permit condition.

[18 AAC 50.345(a)(5), 1/18/97]

[18 AAC 50.320(a-c), 1/18/97]

- 44.** The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.345(a)(6), 1/18/97]

[18 AAC 50.320(b), 1/18/97]

- 45.** The Permittee shall allow an officer or employee of the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator, to:

45.1 enter upon the premises where a source subject to the construction permit is located or where records required by the permit are kept,

45.2 have access to and copy any records required by the permit,

45.3 inspect any facilities, equipment, practices, or operations regulated by or referenced in the permit, and

45.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.345(a)(7), 1/18/97]

[18 AAC 50.320(a)(2), 1/18/97]

Section 12. Visible Emissions and Particulate Matter Monitoring Plan**Visible Emissions Observations**

- 46.** The Permittee shall observe visible emissions in the exhaust of each of Sources ID No. 7B, 9-12, and 14 as follows:
- 46.1 By December 1, 2002, observe the exhaust for no less than 15 minutes in accordance with Section 13 of this permit. Conduct subsequent tests no less than every 12-months.

Particulate Matter Testing

- 47.** By December 1, 2002, either provide the Department with a vendor guarantee that the Sources ID Nos. 7B, 9-12, and 14 will meet the grain loading standard or conduct a particulate matter source test as set out in Condition 48.
- 48.** Upon Department request, the Permittee shall conduct tests to determine the concentration of particulate matter in the exhaust of a Sources ID No. 7B, 9-12, and 14 as follows:
- 48.1 Conduct the tests according to the requirements set out in Section 9 of this permit; and
- 48.2 During each test, observe visible emissions in accordance with Section 13. Calculate the average opacity that was measured during the test. Submit the results of the visible emission observations and the calculation with the source test report.

Reporting Requirements

- 49.** The Permittee is not required to comply with Conditions 27, 28 and 29 while observing visible emissions.
- 50.** For all visible emissions observations taken under Conditions 46.1 and 48.2, the Permittee shall submit copies of observation results with the facility report required by Condition 37.
- 51.** For all tests to determine the particulate matter in the exhaust of a source conducted under Condition 47, the Permittee shall report as set out in Section 9.
- 52.** The Permittee shall submit a report in accordance with Condition 35 if:
- 52.1 a 15 minute visible emission observation results in 13 or more 15-seconds readings with an opacity greater than 20%;
- 52.2 a 15 minute visible emission observation results in any consecutive six minute average greater than 20%; or

52.3 the results of a test for particulate matter exceed the particulate matter emission limit set out in Condition 11.

[18 AAC 50.320(a)(2)(A-E), 1/18/97]

Section 13. Visible Emission Evaluation Procedures

An observer qualified according to 40 C.F.R. 60, RM 9 shall use the following procedures to determine the reduction of visibility through the exhaust effluent.

Position. The qualified observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented in the 140° sector to his back. Consistent with maintaining the above requirement, the observer shall, as much as possible, make his observations from a position such that his line of vision is approximately perpendicular to the plume direction and, when observing opacity of emissions from rectangular outlets (e.g., roof monitors, open baghouses, noncircular stacks), approximately perpendicular to the longer axis of the outlet. The observer's line of sight should not include more than one plume at a time when multiple stacks are involved, and in any case the observer should make his observations with his line of sight perpendicular to the longer axis of such a set of multiple stacks (e.g., stub stacks on baghouses).

Field Records. The observer shall record the name of the plant, emission location, facility type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet. The time, estimated distance to the emission location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), and plume background are recorded on the sheet at the time opacity readings are initiated and completed.

Observations. Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. The observer shall not look continuously at the plume but instead shall observe the plume momentarily at 15-second intervals. Unless directed to do otherwise in this permit, observe emissions for no less than 15 consecutive minutes to obtain a minimum of 60 observations.

Attached Steam Plumes. When condensed water vapor is present within the plume as it emerges from the emission outlet, opacity observations shall be made beyond the point in the plume at which condensed water vapor is no longer visible. The observer shall record the approximate distance from the emission outlet to the point in the plume at which the observations are made.

Detached Steam Plume. When water vapor in the plume condenses and becomes visible at a distinct distance from the emission outlet, the opacity of emissions should be evaluated at the emission outlet prior to the condensation of water vapor and the formation of the steam plume.

Recording Observations. Opacity observations shall be recorded to the nearest 5 percent at 15-second intervals on the Visible Emissions Observation Record contained in this section. Record the minimum number of observations required by the permit. Each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period.

Data Reduction. To determine compliance with the standard set out in Condition 10 of this permit, count the number of observations that exceed 20% percent opacity and determine the highest average opacity during each consecutive six minute period. Record both numbers on the Visible Emissions Observation Record.

Visible Emissions Field Data Sheet

Certified Observer: _____

Company: _____

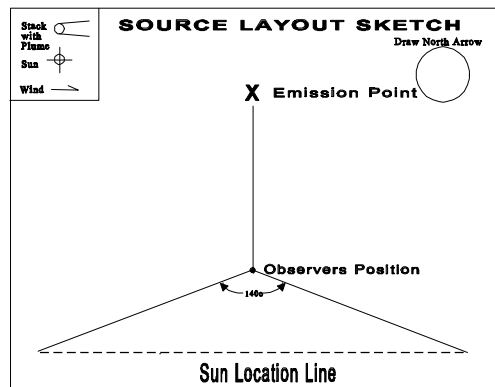
Location: _____

Test No.: _____ Date: _____

Source: _____

Production Rate, Operating Rate &
Unit Operating Hours: _____

Hrs. of observation: _____



Clock Time	Initial				Final
Observer location					
Distance to discharge					
Direction from discharge					
Height of observer point					
Background description					
Weather conditions					
Wind Direction					
Wind speed					
Ambient Temperature					
Relative humidity					
Sky conditions: (clear, overcast, % clouds, etc.)					
Plume description:					
Color					
Distance visible					
Water droplet plume? (attached or detached?)					
Other information					

Visible Emissions Observation Record

Page ____ of ____

Company _____ Certified Observer _____

Test Number _____ Clock time _____

[illegible]

Additional information:

Observer Signature

Data Reduction:

Duration of Observation Period (minutes) _____

Number of Observations _____

Number of Observations exceeding 20% _____

Highest Consecutive Six Minute Average _____

Average Opacity Summary

Set Number	Time Start—End	Opacity	
		Sum	Average

Section 14. ADEC Notification Form

Fax this form to: (907) 269-7508 Telephone: (907) 269-8888

Kotzebue Electric Association

Company Name

Kotzebue Power Plant

Facility Name

1. Reason for notification:☒ Excess Emission ☐ Permit Condition Exceedence**2. Event Information (Use 24-hour clock):**

	START Time:	END Time:	Duration (hr:min):
Date: _____	_____:	_____:	_____:
Date: _____	_____:	_____:	_____:
		Total:	_____:

3. Cause of Event (Check all that apply):

<input type="checkbox"/> START UP	<input type="checkbox"/> UPSET CONDITION	<input type="checkbox"/> CONTROL EQUIPMENT
<input type="checkbox"/> SHUT DOWN	<input type="checkbox"/> SCHEDULED MAINTENANCE	<input type="checkbox"/> OTHER _____

Attach a detailed description of what happened, including the parameters or operating conditions exceeded.

4. Sources Involved:

Identify each Emission Source involved in the event, using the same identification number and name as in the Permit. List any Control Device or Monitoring System affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device
_____	_____	_____	_____
_____	_____	_____	_____

5. Emission Limit and/or Permit Condition Suspected of Exceeding:

Identify each Emission Standard and Permit Condition exceeded during the event. Attach a list of ALL known or suspected injuries or health impacts. Attach additional sheets as necessary.

Permit Condition	Limit	Exceedence
_____	_____	_____
_____	_____	_____

6. Emission Reduction:

Attach a detailed description of ALL of the measures taken to minimize and/or control emissions during the event.

7. Corrective Actions:

Attach a detailed description of ALL corrective actions taken to restore the system to normal operation.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: _____

Signature: _____

Date: _____

Section 15. Permit Documentation

May 1, 2002	NC Machinery letter to ADEC regarding fuel injection timing retard on Source 7B.
April 9, 2002	Valley Detroit letter to KEA regarding EMD engines.
November 28, 2001	KEA letter to ADEC supplying NJUS source test results and applicability to the KEA engines.
June 26, 2001	ADEC letter to KEA regarding waiting for NJUS source test results prior to finalizing permit.
June 15, 2001	KEA letter to ADEC commenting on preliminary permit decision and asking for ADEC to wait for results of the NJUS source test prior to finalizing permit.
January 16, 2001	ADEC letter to KEA and preliminary permit information.
February 14, 2000	ADEC letter to KEA regarding status of the Kotzebue Power Plant construction and operating permits.
March 29, 1999	NC Machinery letter to ADEC correcting statement regarding FITR settings on the caterpillar engines.
December 16, 1999	NC Machinery letter to ADEC regarding FITR settings on the caterpillar engines.
October 28, 1997	ADEC letter to KEA finding the application administratively and technically complete.
September 24, 1997	Envirometrics supplemental information submitted to ADEC regarding dispersion modeling techniques.
August 29, 1997	Envirometrics supplemental information submitted to ADEC regarding Catalyst carbon monoxide controls.
July 1, 1997	Envirometrics response to ADEC April 18, 1997 request for additional information regarding emission data and updated control technology.
May 15, 1997	KEA response to ADEC April 18, 1997 request for information regarding certification statement.
May 8, 1997	Envirometrics response to ADEC April 18, 1997 request for information regarding ambient impact assessments.

April 2, 1997	KEA to ADEC Coastal Project Questionnaire.
February 14, 1997	KEA--Transmittal letter and 2/10/97 Revised PSD permit application.
September 26, 1996	Envirometrics to ADEC proposal for dispersion modeling.
September 25, 1995	Envirometrics response to ADEC July 24, 1995 request for information.
Undated	Envirometrics response to ADEC September 6, 1994 request for information.
August 15, 1994	Envirometrics Summary of Resolution for ADEC comments and revised application pages.
August 10, 1994	KEA supplement to PSD application.
November 11, 1993	KEA Summary of Resolution for ADEC comments.
November 10, 1993	Envirometrics proposal for OLM dispersion modeling to ADEC.
June 2, 1993	KEA/Envirometrics supplement to PSD application.
December 1, 1992	Envirometrics/KEA PSD application for existing sources.
October 16, 1992	KEA transmittal letter for report <i>Air Emissions from Stationary Engines</i> .